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AUTHOR Bauer, Norman J.
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ABSTRACT

The purposes of this paper are: (1) to develop an understanding of three ways in which thinking and the development of foundational knowledge take place; (2) to identify a number of pertinent, empirically grounded examples of educational phenomena related to selected disciplines within the foundations of education; (3) to apply these three ways of thinking and the development of foundational knowledge to acquire a clearer understanding of the nature of the educational phenomena identified; and (4) to propose a strategy related to these three ways of thinking and the development of foundational knowledge which the field of educational foundations might pursue in order to identify and justify such knowledge as an essential component within the preparation programs of prospective teachers and administrators. One basic assumption undergirds this paper: It stipulates that the knowledges generated by the sub-disciplines represented by the broad category foundations of education, constitute powerful "tacit" structures which enable one to construct meaningful and useful critical interpretations of educational phenomena. (Author/JD)

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Ways of Thinking and the Development of Foundational Knowledge

(A Paper Delivered as Part of a Symposium Which Addresed the Problem of Identifying and Justifying Foundational Knowledge of Most Worth)

Delivered during the

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Norman J. Bauer
Professor of Education
State University of New York
Geneseo, New York 14454

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Introduction

The purposes of this paper are: (a) to develop an understanding of three ways in which thinking and the development of foundational knowledge takes place; (b) to identify a number of pertinent, empirically grounded examples of educational phenomena related to selected disciplines within the foundations of education; (c) to apply these three ways of thinking and the development of foundational knowledge to acquire a clearer understanding of the nature of the educational phenomena identified; and (d) to propose a strategy related to these three

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ways of thinking and the development of foundational knowledge which the field of educational foundations might pursue to IDENTIFY and JUSTIFY such knowledge as an essential component within the preparation programs of prospective teachers and administrators.

One basic assumption undergirds this paper and is uequivocally accepted by the writer. That assumption stipulates that the knowledges generated by the sub-disciplines represented by the broad category, foundations of education, constitute powerful 'tacit' structures [1] which enable one to construct meaningful and useful critical interpretations of educational phenomena. They provide one with the sort of knowledge which enables their possessor to, as Broudy has argued elsewhere,"know with ..." According to Broudy, "to know with is to comprehend with a point of view, a value scheme, a style of life. What we know 'with' gives meaning to 'what' we know." [2] Lucas concurs when he suggests that, with such structures, "long after the details of instruction have been forgotten, having had the experience of studying certain "disciplinary maps," a person comprehends something new differently than the person ignorant of those 'maps' . This context building is a form of "tacit" knowing, in which what is peripheral in consciousness gives meaning to what is at its focus." [3] This is the sort of knowing which, while it is not directly related to a particular executive action, lends meaning to such action, facilitates the determination of what choice of action to take and the reasons why such action should be pursued. It is, in other words, the sort of enabling knowledge which is the very heart of the sub-disciplines studied within the realm of the foundations of education.

Three Ways of Thinking and Developing Knowledge

Many philosophers have insisted upon the necessity of distinguishing the speculative or theoretical knowledge from the practical branches of knowledge such as politics and ethics. Aristotle's tripartite classification of the disciplines in his Politics, for instance, consisted of "(1) a *theoretical* science (which) employs the scientific or theoretical part of our rational faculty and has as its end simply to know the truth about the world for its own sake; (2) a *productive* science or art (which would employ) the "deliberative" part of our rational faculty and also involves a kind of knowledge, but its purpose (would be) the making of something useful or beautiful - for example, the arts of shipbuilding, medicine, or writing tragedy. (3) *practical* science or art (which would

employ) the "deliberative" part of our reason (seeking) a kind of knowledge,(whose) end is action or "doing" not "making"and so it seeks knowledge in relation to desire or as a guide to conduct." [4]

The theoretical sciences would, of course, include such disciplines as mathematics, physics (which includes biology and psychology for Aristotle), and "theology" or metaphysics; with no change whatever in kind of thought, such sciences could also be seen as including the sub-disciplines related to the 'foundations of education.' They could, in other words, include such disciplines as philosophy of education, history of education, curriculum theory, politics of education, sociology of education, critical theory, policy studies (which would encompass legislative and judicial theory), learning theory, anthropology of education, economics of education, comparative education, and statistical theory.

From the point of view of educational thought, specifically the foundations of education, the productive sciences could be seen as consisting of the making of such educational products as a written philosophy of education, a written curriculum guided by the framework of a theory of curriculum, written objectives reflecting the framework of the adopted curriculum theory, recognition that the educational discourse in which one engages is guided by the accepted curricular theory, recognizing the political nature of the content chosen for instruction, and the likely intellectual and psychical impact of that content on students.

Classroom instruction and school administration are educational endeavors generally considered to be located entirely within the realm of 'practical'. For this reason such endeavors are most often considered to have more to do with art and less to do with deliberative science. Nonetheless, the realm of practical consists of systematized knowledge as well; though it is a form of knowledge which is clearly connected with 'will', 'desire', 'purpose', with Dewey's 'end-in-view.' Historically, practical has been the locus of political and ethical activity. Political activity is guided very much by prevailing societal standards, for instance, the standard of justice, which we associate with many of the liberal democracies in the Western world. Such standards generate the creation of policies, for example, the American policy of providing equal educational opportunities for all people. Such policies, in turn, generate a variety of practices in terms of instructional design,

classroom management, evaluative feedback, school organization, and community involvement.

Empirical Examples of Educational Phenomen

To hearken back to Aristotle once more, we need to recognize the continuing validity of one of the most significant propositions in his Politics, "all men by nature desire to know."[5] That is, all of us, regardless of the phenomena with which we are most concerned, possess a natural desire to want to know the truth or, as Dewey would have insisted in his modification of the search for truth, we have a desire to pursue warranted meaning, recognizing as we do so that our warrant for any meaning may, over time, have to be modified as additional data becomes known to us.[6]

Most thinkers since the time of Aristotle have never seriously questioned this premise about human nature. Though, as I indicated, Dewey did modify it in light of his epistemology. Nor have most questioned in any serious way the notion that the pursuit of knowledge, inquiry into the nature of phenomena, over and above the prospective application of such knowledge, is a good in itself.

Adler, for instance, argues that "the consideration of knowledge extends to all things knowable, to all kinds of knowers, to all the modes of knowledge, and all the methods of knowing."; [7] Presumably he would accept the fact that educational phenomena do exist, that such phenomena can be conceptualized and studied in disciplined ways, such that propositional knowledge, analytic, synthetic and axiological, can be constructed to describe this knowledge, and that both quantitative and qualitative methods are legitimate means for procuring facts, developing interpretations and constructing such knowledge.

Consider the following scenarios which describe educational phenomena with which presumably competent educators have had much contact but which remains largely unproblematic to them.

1. Several school districts in the area of my institution regularly violate the principles derived from the McCollom Case. Residents of these these communities, the school administrators and the teachers in the schools in these schools have come to accept this as standard operating procedure. They have been conditioned to believe that

this is acceptable procedure and have seemingly lost their ability to consider otherwise. Any effort to bring this to their attention, despite the legality of a protest against this activity, would most certainly meet with hostile reactions. If such an action were initiated by a teacher or administrator his or her long-term tenure in these districts would be in serious jeopardy.

2. During a conversation with a graduate student currently enrolled in a course relating to the philosophic and psychological foundations of education being taught by the writer a student expressed deep concern about the refusal of the administration of the school system with which she is affiliated to permit her to enter an area parochial school to provide remedial instruction in the realm of reading, instruction for which she possessed proper credentials and which she would like to provide for the institution in question. She was most distraught over this, could not understand why it could not take place inside the parochial institution, and why the children were, consequently, made to suffer the consequences of not having expertise such as she had made available to them for the purpose of mitigating or rectifying their reading difficulties. To this student such a service seems eminently justifiable and the denial of it is clearly not in the interests of those concerned.

3. Following an address which the writer delivered on the nature of Secular Humanism, during which one of the main points stressed was the reliance of this form of humanism on human intelligence,with deep respect for empirical evidence and the method of science, and with a complete unwillingness to consider transcendent, theological grounds as the basis for making decisions, a departmental colleague, one with a strong fundamentalist persuasion,immediately approached the writer with the words "I disagree with everything you said."

4. During a recent personnel committee meeting in which faculty were being considered for promotion the question of standards emerged regarding the quality of work performed by various members of the faculty who were up for promotion. During the the committee deliberations it became clear that most of the committee members believed that one significant measure of quality of any instructor was the paucity of high grades given by the faculty member being considered for promotion. Discourse about this matter revealed a strong belief on the

part of most of the committee that only a few people in any class ought to be seen as having the capabilities of achieving mastery, and that any other way of seeing teaching was a threat to the standards of excellence which the institution ought to be fostering. Clearly most of the members of this committee had accepted unquestioningly the idea that the purpose of college teaching was to screen, to filter the students, not to teach the students, for *all* students could not be expected to master the material in any course. When confronted with the theory of the mastery curve as developed by Bloom,[8] along with the emphatic stress placed by such a scholar as Adler in his Paideia on the need for *all* students in school to master whatever was taught,[9] the members of the committee were unable to comprehend what was being said. Indeed, their notion of the school as a screening device was and remains a solidly ensconced paradigm of what schools, particularly institutions of higher education, should be doing. Teaching, in other words requires that we give our students an equal opportunity to learn, that everyone should get the same chance, but that, once this chance has been had, some will win and some will lose. Those faculty who see to it that many are on the losing side are the ones who are the *best* faculty, the ones who are upholding standards, and consequently the ones who should be honored for their instructional excellence. Any thought that there could be a more demanding standard, one which focusses on the challenge of getting *everyone* in a classroom to learn <u>everything</u> that is taught, is passed over as a whimsical fancy, not worthy of consideration.

5. New York State has approximately 131 private colleges and universities. In 1967 Governor Rockefeller and the Chancellor Couper of the Board of Regents agreed on the need to creat a committee to advise the Governor and the legislature about "how the State can help preserve the strength and vitality of our private and independent institutions of higher education, yet at the same time keep them free." This committee submitted a report in January, 1968, suggesting that some form of continuing State financial assistance to these institutions was desirable. As a result, the state legislature created a law which included a formula for providing institutional financial aid to private colleges on the basis of conferred degrees. The schedule of aid adpted was Bachelor's Degree - $400; Master's Degree - $400; Doctor's Degree - $2,400. In accord with this schedule, the initial grants of public tax dollars to these nonpublic institutions were given durng the 1969-70 academic year. Since that time the program, known as Bundy Aid, has been continuously enriched until

today, 1988-89, a Bachelor's Degree receives $l,500; a Master's Degree, $950 and a Doctor's Degree,$4,550.[10]

6. In 1983, the Regents in New York State recommended, after many months of consideration, a program referred to as the Regents Action Plan to reform and improve the public schools in the state.This plan included a number of goals, each of which was stated in a particular fashion. Let me cite a few examples." (a) Each student will master communication and computation skills as a foundation to think logically and creatively... (b) Each student will learn methods of inquiry and knowledge gained thought the following disciplines .... (c) Each student will acquire knowledge, understanding and appreciation of the artistic,..."[11] Note the language in which each of these statements is encased. It is the language of "will" be able to this, "will" be able to do that. The assumption clearly is that teachers and schools have the power to determine what students will be able to do after instruction has ensued. Clearly this is wrong; no teacher, no administrator, no school system can control what it is a student will be able to do or become. Clearly, anyone adopting this view puts oneself in the position of being called to task when a student fails to do what it is he 'will' do.

Application

I could go on and on; indeed, the number and frequency of the scenarios, as I think about it, seems almost without end. They emerge constantly during discourse about educational phenomena with colleagues as well as with the lay public. I suspect that many of us have had similar phenomenal encounters. Enough, however, have been enumerated for me to suggest that we can extract significant foundational issues from each of these very real, naturally occurring, qualitative experiences. Each example reveals the lack of what I shall call the'communicative competence' of the significant actor or actors in the example

As Bower has pointed out very clearly, "Existential choice is thus expanded in proportion to the complexity of the symbolic code the individual acquires. A complex symbolic world provides the means for choosing among different interpretational schemes, as well as imagining future possiblities that would result from different scenarios (also involving complex conceptual schemas). Put another way, what cannot be imagined cannot be chosen by the individual. Communicative competence in

using different language systems is essential both for conceptualization and for communicating the nature of one's choices to others. On the other hand, the range of intentional awareness, the ability to make complex interpretations, and the possibility of imagining alternative future possibilities are all restricted by limited language codes that communicate a life world of recipe knowledge. Without access to alternative interpretations of how work or technology can be organized, for example, the individual's existential choice (conscious acts of intending objects of awarenss, interpreting, giving meaning, imaginaing) will be restricted to the givens of the existing social order, and the transcendent nature of sconsciousness will remain unrealized and unexpressed for lack of conceptual ability. ...In effect the existential possiblities of the individual are profoundly influenced both by the conceptual maps codified in the symnbol systems of the culture and the level of existential commitment and awarness of the significant others who play such an instrumental role in the socialization process." [12]

Let me be very clear about the ramifications of this lack of conceptual complexity, this lack of communicative competence, this reliance on 'recipe knowledge'.[13] Each of the significant others in the scenarios I have identified was being perfectly candid when they uttered the words they spoke or wrote; they were not subject to any sort of external or, presumably, internal coercion, nor did they know in any way that what they were saying would have any sort of educational significance. They were simply engaging in the typical discourse in which many practicing teachers engage over time. Much of what they said had been derived through their process of socialization into teaching and administration, nurtured in a presumably natural, taken-for-granted reality.

As Bower has so insightfully argued, the learning that had been acquired by those involved in the six scenarios I have constructed has occured "through symbolic interaction with significant others and is continuous as the individual moves through the different zones and spaces of social life."[14] These persons have internalized the "taken-for-granted attitudes of others, a stock of knowledge is built up that serves as the recipes for defining and acting in different social situations... (these) beliefs and social definitions are communicated as taken for granted, they are often experienced by the individual undergoing socialization as being unproblematic, which assures that they will be likely incorporated into

the individual's frame of reference at the same tacit level of awarenss."[15] These taken-for-granted beliefs constrain imagination, shape interpretations along pre-established lines, and tend to be self-perpetuating.

What each of these examples clearly suggests is that, as Adler has so convincingly argued, "What is not in any way present to or represented in the mind is not known in any of the various senses of the word "know." What the mind cannot reach to and somehow grasp cannot be known."[16] This is very much in line with Dewey's argument that "the function of knowledge is to make one experience freely available in other experiences."[17] He goes on further to argue that "an ideally perfect knowledge would represent such a network of interconnections that any past experience would offer a point of advantage from which to get at the problem presented in a new experience."[18] That is, stated differently, both of these theorists, though operating from quite different epistemological bases, agree that one has to possess intellectual structures if one is to be able to interpret phenomenal experience in a logical and defensible way.

Each of these examples further reveals the inability of persons who had had many educational experiences and much formal training, yet lacked the ability to engage in critial interpretation of those phenomenal experiences, to construct the sorts of mental imagry in such a way that they could utilize them, as Broudy would argue, to create intelligent views of their world and to interpret their experience in light of these world views.[19] Surely this is not atypical for any of us. I, for instance, drive my fuel-injected car daily, have had countless experiences with the ignition, the various guages I see in front of me, and with other physical features in the vehicle. Yet when, as recently occurred, the engine failed to start, I felt utterly lost, unable to think critically and imaginateively about what might have been wrong. Though I had had much experience with my automobile it had left me with practically no clear imagry about how it actually functions. I could say the same thing about most of the phenomenal experiences I have each day. Surface structures of understanding may be acquired, but generally little or no deep structure, no capacity to engage in intelligent discourse and critical interpretation emerges. The same can be said of each of the significant participants in

the scenarios which I have identified.

In order now to focus my analysis I will refer to each of these scenarios and suggest the intellectual imagry which was lacking in the significant actor or actors in each with a series of propositions. This analysis will help put in focus important knowledges related to schooling which are most likely going to be derived only from the study of one or the other of those sub-disciplines contained within the foundations of education.

Proposition No. 1: Teachers, administrators and citizens learn much about their professional worlds in a natural way, on the job, and hence take for granted many of the practices in which they engage.

Proposition No. 2: Teachers and administrators frequently acquire their knowledge of constitutional law in a superficial fashion, thereby preventing them from considering the ramifications of what they observe in their daily lives in a critically reflective way.

Proposition No. 3: Religious fundamentalism sharply restricts the intellectual capability of its adherents to interpret their experience in a critical way.

Proposition No. 4: The belief that colleges exist for the purpose of screening students, of sorting, sifting and categorizinging them, is a notion which is deeply embedded in the minds of college faculty.

Proposition No. 5: The policy of funding private colleges and universities from public tax dollars has brought about a torpid statewide consciousness in which this sort of action is considered to be a natural one, so natural, so inexorable, that many may be fearful of the expression of any thought about changing or eliminating this practice.

Proposition No. 6: Behaviorist language has become so deeply embedded in the thinking of persons engaged in the educational enterprise that it is practically impossible to see any other

way to think about educational endeavors. This, in turn, leads toward a situation in which those who adopt such language find themselves guaranteeing the outcomes of their endeavors, thereby being placed unconsciously in the untenable position of being practicing charlatans.

As you can see from the scenarios I have developed and from the propositions which emerge from these scenarios, Feiman-Nemser and Floden appear to be correct when they conclude from their analysis of the research on teaching that "teachers have not been seen as possessing a unique body of professional knowledge and expertise... teacher's knowledge has the characteristics that philosophers have always attributed to practical knowledge - that is, time bound and situation specific, personally compelling and oriented toward action."[20]

Lortie tends to support the contention of Feiman-Nemser and Floden, arguing that teachers lack a technical culture, a set of commonly held, empirically derived practices and principles of pedagogy.[21] Jackson also implies that teachers lack professional knowledge, are content with simple explanations, and tend to justify their teaching on the basis of feelings and impulse rather than reflection and thought, with the meanings they give to abstract terms, or to any of the languages which they deal, limited to the boundaries of their own experience.[22] And Spring argues that "educators do not agree about what makes a good teacher or about how to evaluate teaching. There are several schools of thought," he points out. "Within any college of education one can find as many ideas about what constitutes good teaching as there are professors of education."[23]

The tendency to question the quality of knowledge about pedagogy which teachers possess is most likely due to the tendency, as Feiman-Nemser and Floden point out, of "placing a higher value on scientific *(deliberative and theoretical)* knowledge than on practical and personal knowledge."[24] (Italics by writer)

The present writer has argued in a number of papers delivered recently that we need to move toward the adoption of a common language system, toward a means of describing, interpreting and evaluating educational phenomena in terms of a common symbol system. Without this

sort of common base for discourse, we will continue to witness the acceptance of the taken-for-granted ideas which have been identified in this paper.

A Strategy

Developing a strategy to cope with this complex language problem, a problem which can only be identifed and understood by those grounded in the knowledges we associate with the foundations, is no easy matter. Given the nature of the behaviorist mentality in education today, and the lack of complexity relative to thinking about the senses of meaning which education has, it appears unlikely that any strategy will be immediately effective in coping with the dilemma of how to identify and justify foundational knowledge in the preparation of teachers and administrators. Still, those of us committed to this domain of intellectual activity ought to be convinced that the theoretical, deliberative knowledges associated with this foundational study are vital to the development of prospective classroom teachers AND school administrators. . That much said, let me enumerate a number of steps which it seems to me would be appropriate to identify and justify foundational knowledge in the teacher education curriculum.

1. AESA in conjunction with its various state units ought to commence a study of that theoretical knowledge which the scholars in each of the sub-disciplines within the field identify as significant and vitally important. Such a study might take the form of a series of task forces, each task force devoted to one of the sub-disciplines and each chaired by an outstanding theoretician. Membership on each task force should be voluntary, all interested parties should have an opportunity to participate, and a written report from each task force should be forthcoming at the end of a specified period of time, perhaps a year to eighteen months. As a part of their respective responsibilities each task force ought to identify examples of taken-for-granted discourse which prevent their posssessors from imagining alternative ways of thinking.

2. The policy of AESA in the recent past of annually publishing brief lists of outstanding books in the area of the foundations of education should be continued. In additon, a comprehensive list of outstanding books which consider, in whole or in part , the taken-for-granted discourse identified by the task forces should be identified and published. These

books, along with the discourse identified, would constitute a significant criterion which could be used to identify and justify the content of the courses and programs in the foundations.

3. One of the AESA journals should devote an issue to the problem of what knowlede is of most worth in each of the sub-disciplines in the area. Reputable scholars in the various fields should be requested to identify taken-for-granted knowledges and values which, if more were known to those possessing such understandings, would make increasingly problematic these accepted ways of seeing. Foundational knowledges related to these taken-for-granted ideas should be identified and justifications for their inclusion in teacher preparation programs, particularly in light of the problematics which have been identified, should be done.

4. AESA should encourage each state organization of foundations scholars to establish relations with significant state agencies, including those related to state departments of education, state budget offices, and the significant legislative committees and legislative leadership within each of the states, and commence a regular effort to correspond with these people about the significance of foundational knowledges as the basis for the preparation of prospective teachers and administrators.

5. The national AESA should commence an annual survey of each of the states in the Union to determine the nature of acceptance of foundational knowledge in each state, to determine the nature of problems confronting the foundations of education in the states, and to take prompt and decisive action to cope with any movement anywhere to abolish or seriously jeopardize the nature of the foundational content provided prospective teachers and administrtators in that state.

Summary

In this paper I have identified three ways of thinking which have existed ever since the Greeks commenced seriously examining the world about them. These three ways of thinking included the theoretical or deliberative realm of thought, that realm we frequently associate with descriptive, 'is' type language, the theoretical realm of our endeavors; the productive realm , that realm in which we pursue the creation of

artifacts, of environmental arrangements, of the products we have a penchant for making, all of which achieve a degree of beauty and elegance in our eyes; and the realm of the practical, that realm which we often assocate with values, with the 'ought' world of experience, with that dimension of our lived experience in which basic principles, policies and practices within the political, the ethical and the aesthetic domains apply to our everyday decision-making.

A number of significant scenarios which revealed a lack of foundational knowledge on the part of the significant others were identified. Six propositions were then constructed, each derived from one of the scenarios, each suggesting a significant realm of foundational knowledge which persons involved in education endeavors need if they are to have the necessary background to handle the problematic environments in which they operate in critically responsible ways.

It was pointed out that the basis for thinking about teacher knowledge at the present time is flimsey at best, probably largely unsophisticated, and hence not likely to be seen as anything more than personal disposition, hunch-oriented, and nothing more than an unreflective capacity to understand instructional practice.

Finally, based on the assumption that significant foundational knowledge does exist,that it is vital to the preparation of a classroom teacher or a school administrator, and that it can be identified and justified in terms of its inclusion in teacher preparation programs, the paper concluded with a five-step strategy designed to increase the probability that foundational study will remain a significant component of teacher preparation programs wherever they exist.

Reading Notes

1.Broudy, Harry. (May 1979). "The brightest and the best." Phi Delta Kappan. Vol. 60, 640-644.

2. IBID. 643.

3. Lucas, Christopher J. (1984). "Foundations of education - Schooling and the social order. Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 126.

4. Frankena, William K. (1965). Three historical philosophies of education - Aristotle, Kant, Dewey. Chicago: Scott, Foresman and Company. 18.

5. IBID.

6. Dewey, John. (1938). Logic - The theory of inquiry. New York: G. P. Putnam's Sons. (1915,1942). 7.

7. Adler, Mortimer, J., Editor in Chief. (1952). "The great ideas : A syntopicon of great books of the western world." Volume 1, Chapter 43, "Knowledge." In: Hutchins, Robert Maynard, Editor in Chief. (1952). Great books of the western world. Chicago: Encyclopaedia Britannica, Inc.

8. Bloom, Benjamin. (1976). Human characteristics and school learning. New York: McGraw-Hill Book Co.

9. Adler, Mortimer, J. (1982). The paideia proposal. New York: Macmillan Publishing Co.

10. New York Consolidated Laws Service - Cumulative Supplement. "Education Law - #6401." New York: the Lawyers Co-Operative Publishing Co., Dec., 1987, Vol. 10B, p. 477; Supplement, Vol. 10B, 146.

11. State Education Department, Albany, New York. (July 29, 1983). Proposed action plan to improve elementary and secondary

education results in New York. 6.

12. Bowers, C.A. (1984). The promise of theory-Education and the politics of cultural change. New York: Longman. 47.

13. Hall, Edward T. (1977). Beyond culture. Garden City, N.Y.: Anchor Books. 44.

14. Bowers, Op. Cit., 39.

15. Ibid.

16. Adler, Syntopicon. Op. Cit. 881.

17. Dewey, John. (1916, 1961). Democracy and education - An introduction to the philosophy of education. New York: The Macmillan Company. 339.

18. Ibid., 340.

19. Broudy, Harry. (February 1979). "Tacit knowing as a rationale for liberal education." Teachers College Record. vol. 80, 446-462.

20. Feiman-Nemser, Sharon and Floden, Robert E. (1986). "The cultures of teaching." Wittrock, Merlin C., Editor. Handbook of research on teaching - Third edition. New York: Macmillan Publishing Company. 512.

20. Lortie, Daniel. (1975). Schoolteacher. Chicago: University of Chicago Press.

21. Jackson, Philip. (1968). Life in classrooms. New York: Holt, Rinehart & Winston.

22. Spring, Joel. (1988). Conflict of interests - The politics of American education. New York: Longman. 66-67.

23. Feiman-Nemser et. al. Op. Cit. 613.